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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 006224.P001X3 10/607,718 06/27/2003 Kevin T. Rowney 9417 **EXAMINER** 02/10/2006 7590 DAYE, CHELCIE L

Marina Portnova BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP Seventh Floor 12400 Wilshire Boulevard Los Angeles, CA 90025

ART UNIT PAPER NUMBER 2161

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application	on No.	Applicant(s)	
	10/607,71	8	ROWNEY ET AL.	
Office Action Summary	Examiner		Art Unit	
	Chelcie Da	aye	2161	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
 Responsive to communication(s) filed on 27 June 2003. This action is FINAL. 2b) ☐ This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. 				
Disposition of Claims				
 4) Claim(s) 1-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-32 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 				
Application Papers				
 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 27 June 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 				
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s) 1) Notice of References Cited (PTO-892)	(070.010)	4) Interview Summary		
 2) Notice of Draftsperson's Patent Drawing Review 3) Information Disclosure Statement(s) (PTO-1449 Paper No(s)/Mail Date 10/15/2004. 		Paper No(s)/Mail Do 5) Notice of Informal P 6) Other:		-152)

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DETAILED ACTION

1. This action is issued in response to Application filed on June 27, 2003.

2. Claims 1-32 are pending.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the specification: Fig.7B, item 754. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "sensitive data" in claims 1-32 is a broad term, which renders the claims indefinite. The term "sensitive" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Examiner is unsure of what applicant defines as sensitive data. Data that is sensitive at one point in time may not be sensitive at another point in time. Also, certain data may be considered sensitive to one person, but may not be considered sensitive to another person.

Therefore, the terminology "sensitive" is not consistent at all times. In order to proceed with the prosecution, Examiner determines "sensitive" to mean restricted, unauthorized, or offensive information, and will examine the claims as such.

The term "if" in claims 1,2,20,31, and 32 is a relative term, which renders the claim indefinite. The term "if" is considered alternative language, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Due to the language of the above stated claims Examiner is unclear what the outcome would result

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in when the "if" statement is not achieved. Therefore the above stated claims will be examined without giving weight to the term "if".

6. Claims 13,19 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the abstract data structure" in line 1 of the claim.

Claim 13, as well as the claims to which it depends from fails to reference "an abstract data structure". Therefore, there is insufficient antecedent basis for this limitation in the claim.

Claims 17 and 28 recite the limitation "persistent storage device" in line 5 of the claim. Claims 17 and 28, as well as the claims to which they depend from fail to reference "a persistent storage device". Therefore, there is insufficient antecedent basis for this limitation in the claim.

Claims 19 and 30 recite the limitation "the application" in line 2 of the claim.

Claims 19 and 30, as well as the claims to which they depend from fail to reference "an application". Therefore, there is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3,6-15,20,21,24-26,31, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Shannon (US Patent No. 6,233,618).

Regarding Claims 1,20, and 32, Shannon discloses a method comprising: searching contents of a plurality of data storage media of a personal computing device¹ (column 10, lines 2-6, Shannon) for pre-selected sensitive data² (Fig.2, item 208; column 8, lines 26-30, Shannon); and

if at least a portion of the pre-selected sensitive data is detected³ (column 14, lines 26-29, Shannon), sending a notification⁴ of detection of the pre-selected sensitive data to a system via a network (Fig.4, item 214; column 14, lines 29-32, Shannon).

Regarding Claim 2, Shannon discloses a method further comprising:

if at least a portion of the pre-selected sensitive data is detected (column

14, lines 26-29, Shannon), preventing access to the detected data (column 14,

...
lines 37-41, Shannon).

¹ Examiner Notes: The clients and servers are representations of a personal computing device (column 5, lines 45-50, Shannon).

² Examiner Notes: Database 208 is created separately and distributed to different organizations (column 9, lines 15-18 and 39-43, Shannon), rendering the information provided as pre-selected. Also, the servers contain restricted files, meaning files that are not accessible to everyone. Sensitive data is information that is kept secret and discloses only to those with the correct authority. As a result, restricted files correspond to sensitive data.

³ Examiner Notes: Detection corresponds to matches.

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Regarding Claims 3 and 21, Shannon discloses a method wherein the content is searched periodically (columns 9-10, lines 64-67 and 1, respectively, Shannon).

Regarding Claims 6 and 24, Shannon discloses a method further comprising:

receiving instructions defining a scope of a search⁵ for the personal computing device from the system (column 9, lines 32-39, Shannon).

Regarding Claim 7, Shannon discloses a method wherein searching contents of a plurality of data storage media within a personal computing device comprises:

receiving an abstract data structure⁶ associated with the pre-selected sensitive data (column 8, lines 49-51, Shannon); and

utilizing the abstract data structure (column 8, lines 51-56, Shannon) when searching the contents of the plurality of data storage media of the personal computing device (column 10, lines 2-6, Shannon) for the pre-selected sensitive data (Fig.2, item 208; column 8, lines 26-30, Shannon).

⁴ Examiner Notes: The notification to the system is the act of denying access.

⁵ Examiner Notes: The Network Management Protocol controls the configuration and content within a database, as well as updating the database information periodically. As a result, the "Management Protocol" corresponds with the action of receiving instructions and the controlling and updating of the content corresponds to the action of defining a scope for a search.

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Regarding Claims 8 and 25, Shannon discloses a method wherein searching contents of a plurality of data storage media of the personal computing device comprises monitoring one or more specific data operations (column 13, lines 23-34, Shannon) for presence of at least a portion of the pre-selected sensitive data (column 14, lines 26-29, Shannon).

Regarding Claims 9 and 26, Shannon discloses a method wherein at least one of the one or more specific data operations is selected from the group consisting of a file-read, a file-write, a file-update (column 9, lines 27-31, Shannon), a read from a removable media device, a write to a removable media device, and access of data stored on any of the plurality of data storage media by a program running on the personal computing device (column 12, lines 24-31, Shannon).

Regarding Claim 10, Shannon discloses a method wherein the preselected sensitive data has a tabular format (column 8, Table 3, Shannon).

Regarding Claim 11, Shannon discloses a method wherein the preselected sensitive data is capable of being re-structured into a tabular format based on relationships among elements (column 7, Table 2 and lines 58-64,

⁶ Examiner Notes: Table 3 is a form of an index data structure, which corresponds with abstract data

Shannon) of the pre-selected sensitive data (Fig.2, item 208; column 8, lines 26-30, Shannon).

Regarding Claim 12, Shannon discloses a method wherein the preselected sensitive data is maintained by an organization in at least one of a spreadsheet, a flat file, and a database (column 8, lines 24-30, Shannon).

Regarding Claim 13, Shannon discloses a method wherein the abstract data structure comprises a tuple-storage structure⁷ derived from the pre-selected data (column 8, Table 3, Shannon).

Regarding Claim 14, Shannon discloses a method wherein the abstract data structure comprises a plurality of tuples, each of the plurality of tuples including a row numbers of a data item in a corresponding cell of a tabular structure of the pre-selected data (column 8, Table 3 and lines 49-51, Shannon; wherein the plurality of tuples correspond to the multiple rows and also the rows within Table 3 are numbered which corresponds to the "including row numbers of a tabular structure").

structure.

⁷ Examiner Notes: The tuple-storage structure is Table 3 shown with numbered rows.

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Regarding Claim 15, Shannon discloses a method wherein each of the plurality of tuples additionally includes a column number (column 8, lines 57-62, Shannon) and optionally a column type of the data item in the corresponding cell.

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Regarding Claim 31, Shannon discloses a personal computing device comprising:

a plurality of storage media storing various data (column 6, lines 29-33, Shannon); and

at least one processor coupled to the plurality of storage media (column 5, lines 8-13, Shannon), at least one processor executing a set of instructions which cause the processor to search contents of the plurality of data storage media (column 10, lines 2-6, Shannon) for pre-selected sensitive data (Fig.2, item 208; column 8, lines 26-30, Shannon), and to send a notification of detection of the pre-selected sensitive data to a system via a network (Fig.4, item 214; column 14, lines 29-32, Shannon) if at least a portion of the pre-selected sensitive data is detected (column 14, lines 26-29, Shannon).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

⁽a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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10. Claims 4,5,16-19,22,23, and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shannon (US Patent No. 6,233,618) as applied to claims 1-3,6-15,20,21,24-26,31, and 32 above, and further in view of Brandt (US Patent No. 5,892,905).

Regarding Claims 4 and 22, Shannon discloses a method wherein the content is searched with the personal computing device via the network (column 10, lines 2-6, Shannon). However, Shannon does not explicitly disclose searching the content while the computing device is disconnected from the network. On the other hand, Brandt discloses searching the content while the computing device is disconnected from the network (column 17, lines 46-55, Brandt). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Brandt's teachings into the search engine of the Shannon system. A skilled artisan would have been motivated to combine the two references as suggested by Brandt, in order to ensure reliability without undue disruption in running the software processes. The act of disconnecting also enables the system to temporarily shutdown for maintenance and allows for energy consumption. As a result, this allows the user to be more mobile and effective.

Regarding Claims 5 and 23, the combination of Shannon in view of Brandt, disclose a method wherein sending a notification comprises:

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upon detecting the pre-selected sensitive data (column 14, lines 26-29, Shannon), creating a message containing the notification of the detection of the pre-selected sensitive data (Fig.4, item 214; column 14, lines 42-46, Shannon); placing the message in a transmission queue⁸ (column 12, lines 37-45, Shannon); and

transmitting the message to the system after the personal computing device is re-connected to the system (column 18, lines 24-30, Brandt).

Regarding Claims 16 and 27, the combination of Shannon in view of Brandt, disclose a method wherein the plurality of data storage media is selected from the group consisting of a main memory ("DRAM"; column 10, lines 8-11, Brandt), a static memory, and a mass storage memory.

Regarding Claims 17 and 28, the combination of Shannon in view of Brandt, disclose a method wherein searching contents of a plurality of data storage media comprises:

searching content of each volatile storage device⁹ within the plurality of data storage media (column 10, lines 53-61, Brandt); and

searching content of each persistent storage device within the plurality of data storage media (column 10, lines 53-61, Brandt).

⁸ Examiner Notes: The transmission queue corresponds to "TCP/IP".

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Regarding Claims 18 and 29, the combination of Shannon in view of Brandt, disclose a method further comprising detecting use of the pre-selected data by an application¹⁰ running on the personal computing device (column 6, lines 8-15, Shannon).

Regarding Claims 19 and 30, the combination of Shannon in view of Brandt, disclose a method further comprising:

identifying the application using the pre-selected data (column 10, lines 51-59, Shannon); and

reporting the identified application (column 10, lines 59-64, Shannon).

⁹ Examiner Notes: The volatile storage device corresponds to DASD (Direct Access Storage Device). ¹⁰ Examiner Notes: The application corresponds to a "network device", which has access to the databases and permits data communication (column 5, lines 12-20, Shannon).

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Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chelcie Daye whose telephone number is 571-272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye Patent Examiner Technology Center 2100 January 31, 2006

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